

Listing of the Claims:

1. (Currently Amended) A projection apparatus (1) for projecting an image onto a projection screen (17), comprising

an imaging device (11) for representing the image at a reduced scale,
an illumination unit (2) with a lamp (3) and a condenser system (4) and/or a lamp reflector, preferably a focusing lamp reflector, for illuminating the imaging device (11),

a projection assembly (10) comprising a projection lens (12) and provided for imaging the image represented by the imaging device (11) enlarged on the projection screen (17), and

a spatial light mixing system (7) for compensating local differences in the brightness distribution, characterized in that it comprises an adjustable alignment deflecting mirror (19) that is arranged in the illumination path of the imaging device (11) and is provided for adjusting the illumination of the imaging device (11), wherein the position of said alignment deflecting mirror (19) that is defined by tilt angles can be adjusted by ~~changing the tilting angles, more~~ means of setting elements which change particularly the polar and azimuthal angles of the beam reflected, ~~by means of setting elements~~, wherein the alignment reflecting mirror (19) is arranged in the light path between the lamp (3) and the light mixing system (7).

Claim 2. (Currently Amended) A projection apparatus (1) according to claim 1, characterized in that the alignment deflecting mirror (19) is arranged between the

condenser system (4) of the illumination unit (2) or a lamp reflector and the imaging device (11).

Claim 3. (Currently Amended) A projection apparatus (1) according to ~~the preceding~~ claim 1, characterized in that further condenser lenses for illuminating the imaging device (11) are arranged between the alignment deflecting mirror (19) and the imaging device (11).

Claim 4. (Currently Amended) A projection apparatus (1) according to ~~any one of the preceding claims~~ claim 1, characterized in that the light incoming surface (13) of the spatial light mixing system (7) is arranged in or in the immediate vicinity of the focal plane of the condenser (4) of the illumination unit (2) or a lamp reflector.

Claim 5. (Currently Amended) A projection apparatus (1) according to ~~any one of the preceding claims~~ claim 1, characterized in that the spatial light mixing system (7) is a device, more particularly a light mixing rod (8), extending in the direction of light propagation.

Claim 6. (Currently Amended) A projection apparatus (1) according to ~~any one of the preceding claims~~ claim 1, characterized in that the alignment deflecting mirror (19) is arranged between the condenser (4) of the illumination unit (2) or a lamp reflector and the light incoming surface (13) of the spatial light mixing system (7).

Claim 7. (Currently Amended) A projection apparatus (1) according to

~~anyone of the preceding claims~~ claim 1, characterized in that it comprises an illumination sensor (16) for determining the intensity of the illumination of the imaging device (11) provided by the illumination unit (2).

Claim 8. (Currently Amended) A projection apparatus (1) according to ~~the preceding claim~~ claim 1, characterized in that it comprises an optical outcoupling element (26) for coupling out a part of the luminous flux generated by the illumination unit (2) for illuminating the imaging device (11), wherein said outcoupling element (26) is arranged in the illumination path between the illumination unit (2) and the imaging device (11) and couples the light out of the light path on its way from the illumination unit (2) to the imaging device (11).

Claim 9. (Currently Amended) A projection apparatus (1) according to ~~any one of the preceding claims~~ claim 8, characterized in that the outcoupling element (26) is arranged between the output of the spatial light mixing system (7) and the imaging device (11).

Claim 10. (Currently Amended) A projection apparatus (1) according to ~~any one of claims 8 through 9~~ claim 8, characterized in that the outcoupling element (26) is a semi-transparent mirror (27).

Claim 11. (Currently Amended) A projection apparatus (1) according to ~~any one of claims 7 through 10~~ claim 7, characterized in that it comprises drivable setting elements (23) for adjusting the position of the alignment deflecting mirror (19) and a control unit, which can be used to align the position of the alignment deflecting

mirror (19) in relation to the signal of the illumination sensor (16).

Claim 12. (Currently Amended) A projection apparatus (1) according to ~~the~~ preceding claim 11, characterized in that the alignment deflecting mirror (19) is automatically aligned by the control unit.

Claim 13. (Currently Amended) A projection apparatus (1) according to ~~any one of the preceding claims~~ claim 1, characterized in that it comprises one or more diaphragms that can be inserted in the path of light, preferably two slotted diaphragms arranged in transverse direction to each other, for adjusting the alignment deflecting mirror (19).

Claim 14. (Currently Amended) A projection apparatus (1) according to ~~any one of the preceding claims~~ claim 1, characterized in that the illumination unit (2) is arranged in an illumination module (24) and the projection assembly (10) is arranged in a separate projection module (25).

Claim 15. (Currently Amended) A projection apparatus according to ~~the~~ preceding claim 14, characterized in that the imaging device (11) and the projection lens (12) are arranged in the projection module (25).

Claim 16. (Currently Amended) A projection apparatus (1) according to ~~any one of claims 14 through 15~~ claim 14, characterized in that the alignment deflecting mirror (19) and the condenser system (4) of the illumination unit (2) or the lamp reflector are arranged in the illumination module (24).

Claims 17 – 21 (Cancelled).

Claim 22. (Currently Amended) A projection apparatus (1) according to ~~any one of claims 14 through 21~~ claim 14, characterized in that it comprises alignment means for fine-aligning the image projected, wherein said alignment means can be used to adjust the position of the projection module (25) in the projection apparatus (1).

Claim 23. (Currently Amended) A projection apparatus (1) according to ~~any one of claims 14 through 22~~ claim 14, characterized in that the position of the illumination module (24) is fixed in the projection apparatus (1) or that the illumination module (24) comprises alignment means for coarse-aligning the position of the illumination module (24) in the projection apparatus (1).

Claim 24. (Currently Amended) A projection apparatus (1) according to ~~the preceding~~ claim 14, characterized in that the illumination module (24), after having been subjected to a service measure, or an exchanged illumination module can be inserted in the projection apparatus (1) without an alignment of the projection module (25) becoming necessary therein.

Claim 25. (Currently Amended) A projection apparatus according to ~~any one of the preceding claims~~ claim 1, characterized in that it is designed as a rear

projection apparatus.

Claim 26. (Currently Amended) A projection wall, comprising a plurality of projection apparatuses ~~(1)~~ according to ~~any one of the preceding claims~~ claim 1.

Claim 27. (Currently Amended) A method for adjusting the illumination of an imaging device ~~(11)~~ of a projection apparatus ~~(1)~~ for projecting an image onto a projection screen ~~(17)~~, comprising

an imaging device ~~(11)~~ for representing the image at a reduced scale,

an illumination unit ~~(2)~~ with a lamp ~~(3)~~ and a condenser ~~(4)~~ and/or a lamp reflector, preferably a focusing lamp reflector, for illuminating the imaging device ~~(11)~~, and a projection assembly ~~(10)~~ comprising a projection lens ~~(12)~~ and provided for imaging the image represented by the imaging device ~~(11)~~ enlarged on the projection screen ~~(17)~~, and

a spatial light mixing system ~~(7)~~ for compensating local differences in brightness distribution, characterized in that an adjustable alignment deflecting mirror ~~(19)~~ for adjusting the illumination of the imaging device ~~(11)~~ is arranged in the illumination path of the imaging device ~~(11)~~, wherein the position of said alignment deflecting mirror ~~(19)~~ that is defined by tilt angles can be adjusted by means of setting elements ~~changing the tilt angles, more which change~~ particularly the polar and azimuthal angles of the beam reflected, ~~by means of setting elements,~~

wherein the alignment reflecting mirror (19) is arranged in the light path between the lamp (3) and the light mixing system (7).

Claim 28. (Currently Amended) A method according to claim 27, characterized in that it comprises a feature of a projection apparatus (1) ~~according to any one of claims 2 through 25.~~